## 1 CLAIMS

- 3 1. A method for determining an interruption of a
- 4 communication connection between a domestic appliance
- 5 connected in a local area network to which further domestic
- 6 appliances are connected, to a bus line arrangement
- 7 comprising a bus line controller, and the relevant bus line
- 8 controller to which information about its respective
- 9 appliance status is transmitted by the relevant domestic
- 10 appliance,
- 11 and for the continuation of such transmissions on re-
- 12 establishing the communication connection after eliminating
- 13 the interruption,
- 14 wherein the relevant domestic appliance is allocated a
- 15 unique address for its identification in the local area
- 16 network, characterised in that
- 17 when said information is transmitted merely in the form of
- 18 alteration information from said one domestic appliance (HG1
- 19 to HGn) on its respective appliance status to the bus line
- 20 controller (BM), a certain fixed criterion of said domestic
- 21 appliance (HG1 to HGn) is repeatedly requested over time by
- 22 the bus line controller (BM) whereupon if the communication
- 23 connection exists with the relevant domestic appliance (HG1
- 24 to HGn), a reply signal is transmitted therefrom to the bus
- 25 line controller (BM),
- 26 the absence of such a reply signal is considered to be an
- 27 interruption of the communication connection with the
- 28 relevant domestic appliance (HG1 to HGn), whereupon a search
- operation for the relevant domestic appliance (HG1 to HGn)
- 30 wherein a general interrogation signal (BS) is transmitted
- 31 is carried out by the bus line controller (BM) until a reply
- 32 signal is obtained from said appliance again,

- and then information corresponding to the then valid current
- 2 status of the relevant domestic appliance (HG1 to HGn) is
- 3 transmitted to the bus line controller (BM).

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- 5 2. The method according to claim 1, characterised in that
- 6 the specific fixed criterion of said domestic appliance (HG1
- 7 to HGn) is requested cyclically.

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- 9 3. The method according to claim 1 or claim 2,
- 10 characterised in that the respective appliance principal
- 11 status is requested as the specific fixed criterion of said
- 12 domestic appliance (HG1 to HGn).

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- 14 4. The method according to any one of claims 1 to 3,
- 15 characterised in that said search operation is carried out
- 16 cyclically.

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- 18 5. The method according to any one of claims 1 to 4,
- 19 characterised in that the current status of said domestic
- 20 appliance (HG1 to HGn) is only transmitted to the bus line
- 21 controller (BM) after the relevant domestic appliance (HG1
- 22 to HGn) has been allocated a unique address at this time by
- 23 a registration procedure in the local area network (LAN).

- 25 6. A device for determining for determining an
- 26 interruption of a communication connection between a
- 27 domestic appliance connected in a local area network to
- 28 which further domestic appliances are connected, to a bus
- 29 line arrangement comprising a bus line controller, and the
- 30 relevant bus line controller to which information about its
- 31 respective appliance status is transmitted by the relevant
- 32 domestic appliance,

- 1 and for the continuation of such transmissions on re-
- 2 establishing the communication connection after eliminating
- 3 the interruption,
- 4 wherein the relevant domestic appliance is allocated a
- 5 unique address for its identification in the local area
- 6 network, characterised in that
- 7 when said information is transmitted merely in the form of
- 8 alteration information from said one domestic appliance (HG1
- 9 to HGn) on its respective appliance status to the bus line
- 10 controller (BM), the bus line controller (BM) repeatedly
- 11 requests over time a certain fixed criterion of said
- 12 domestic appliance (HG1 to HGn),
- 13 said bus line controller (BM) being configured such that in
- 14 the presence of a communication connection to the relevant
- domestic appliance (HG1 to HGn), it receives a reply signal
- 16 from said appliance in each case,
- 17 said bus line controller (BM) comprises an evaluation device
- 18 which is configured such that, in the absence of a reply
- 19 signal, it provides a message signal indicating an
- 20 interruption of the communication connection to the relevant
- 21 domestic appliance (HG1 to HGn)
- 22 and the bus line controller (BM) is further constructed so
- 23 that in response to said message signal, it carries out a
- 24 search operation for the relevant domestic appliance (HG1 to
- 25 HGn) wherein a general interrogation signal (BS) is
- 26 transmitted until a reply signal is obtained from said
- 27 appliance again, and said bus line controller (BM) is
- 28 further constructed such that it then allows information
- 29 corresponding to the then valid current appliance status to
- 30 be received.

- 32 7. The device according to claim 6, characterised in that
- 33 the bus line controller (BM) is a controller which

- 1 cyclically requests said certain fixed criterion of the
- 2 relevant domestic appliance (HG1 to HGn).

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- 4 8. The device according to claim 6 or claim 7,
- 5 characterised in that said bus line controller (BM) is a
- 6 controller which cyclically repeatedly requests the
- 7 principal status of said domestic appliance (HG1 to HGn).

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- 9 9. The device according to any one of claims 6 to 8,
- 10 characterised in that the bus line controller (BM) is a
- 11 controller which cyclically carries out said search
- 12 operation.

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- 14 10. The device according to any one of claims 6 to 9,
- 15 characterised in that the bus line controller (BM) is
- 16 designed such that before receiving said current status of
- the relevant household appliance (HG1 to HGn), it includes
- this in a registration procedure by which means said
- 19 relevant domestic appliance (HG1 to HGn) obtains a unique
- 20 address at this time in the local area network (LAN) by
- 21 which it can be reached in the local area network (LAN).

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